

Title (en)

Method for manufacturing diamond single crystal substrate, and diamond single crystal substrate

Title (de)

Verfahren zur Herstellung von einkristallinem Diamantsubstrat und dadurch hergestelltes Substrat

Title (fr)

Procédé de fabrication d'un substrat monocristallin de diamant et le substrat ainsi obtenu

Publication

EP 1707654 A1 20061004 (EN)

Application

EP 06251555 A 20060323

Priority

- JP 2005091061 A 20050328
- JP 2006010596 A 20060119

Abstract (en)

A method for manufacturing a diamond single crystal substrate, in which a single crystal is grown from a diamond single crystal serving as a seed substrate by vapor phase synthesis, said method comprising: preparing a diamond single crystal seed substrate which has a main surface whose planar orientation falls within an inclination range of not more than 8 degrees relative to a {100} plane or a {111} plane, as a seed substrate; forming a plurality of planes of different orientation which are inclined in the outer peripheral direction of the main surface relative to the main surface on one side of this seed substrate, by machining; and then growing a diamond single crystal by vapor phase synthesis.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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